devoted to polycythaemia vera, but the authors point to the increasing evidence that although treatment with radioactive phosphorus prolongs life it is almost certainly leukaemogenic and better results may eventually be obtained with venesection plus chemotherapy.

This is a big book on a single disease, perhaps not so big as it feels, as it is printed on heavy paper, but certainly an expensive book. It displays the characteristics we have come to associate with the senior author—a wealth of clinical experience, an aptitude for the assimilation of new knowledge, a facility in broad generalization and in the creation of new hypotheses. It is well illustrated and contains a small number of good colour plates. It deserves to be widely read.

L. J. WITTS.

REFERENCE

[1] Hayhoe, F. G. J., Quaglino, D., and Doll, R., *The Cytology and Cytochemistry of Acute Leukaemias*, 1964. H.M.S.O., price 63s.

## *Vascular Physiology*

**Handbook of Physiology.** A critical, comprehensive presentation of physiological knowledge and concepts. **Circulation.** Section editor: W. F. Hamilton. Executive editor: Philip Dow. Section 2. Volume 2. (Pp. 759–1,787+v; illustrated. £12 16s.) Washington: American Physiological Society. London: Baillière, Tindall and Cox. 1963.

Up to the 1930s the Germans held the monopoly of the great reference "Handbücher," such as Mohr-Stähelin in medicine and Henke-Lubarsch in pathology. With the changing linguistic influence in science the American Physiological Society has undertaken the task of producing a massive multivolume work of reference. Three volumes will cover the section on circulation totalling 80 chapters. Volume II of this series contains chapters 23–48, dealing with the physiology of arteries, capillaries, and veins (with excursions into arterial pathology) and chapters on organ circulation such as muscle (Barcroft), skin (Greenfield), liver (Bradley), kidney (Selkurt), heart (Gregg and Fisher), and lungs (Fishman).

It is impossible to do justice to a work of this magnitude, but even to one whose field of interest has been in the circulation the recent changes in outlook and method are striking. Electron microscopy (page 1011) shows the complexity of the capillary endothelial cell with pinocytic vesicles and visible pores. The concept of capillary walls as simple semi-permeable membranes had to be abandoned long ago. Every chapter in this book has been contributed by a master, who has usually presented a personal view backed by an adequate review of the literature.

The carping critic can readily find omissions. The section on methods of measuring blood flow (Kramer *et al.*) is concise but omits discussion of many useful techniques in this vitally important field, such as thermodilution. The section on lymphatics (Mayerson) does not mention the exciting new fields of study resulting from Gowans's demonstration of the lymphocyte circulation. In the section on the venous circulation (Alexander) Sharpey-Schafer's technique of measurement of venomotor tone is not mentioned. These omissions may perhaps be corrected in later volumes, but they are merely indicative of the impossibility of keeping a work of this magnitude completely up to date as science continues its advance between writing and printing.

It is important to recognize the great thoroughness with which this work has been conceived and the authoritative character of every chapter. This book should be in all medical school libraries and also in the laboratories of those engaged in circulatory research. The clinical investigator will be particularly pleased to realize the extent to which the physiological techniques in this volume are directly applicable to human problems.

J. MCMICHAEL.

## *Mercury*

**Toxicity of Mercury and Its Components.** By P. Lesley Bidstrup, M.D., F.R.A.C.P., M.R.C.P. Elsevier Monograph. (Pp. 112; illustrated. 30s.) Amsterdam, London, and New York: Elsevier. 1964.

This short monograph of 112 pages is one of the Elsevier Monographs on toxic agents produced under the distinguished editorship of Dr. Ethel Browning. In it Dr. Bidstrup covers all aspects of the toxicity of mercury and its compounds and has not overburdened the text by too much physical and chemical detail. Most of the book is devoted to the therapeutic uses of mercury and poisoning by its inorganic and organic compounds. The reader will find accounts of pink disease, mercurialentis, and the interesting outbreak in Japan known as Minamata disease. Full details of the B.A.L. treatment of poisoning by soluble mercuric salts are given, and it is made clear that this is of no value in acute poisoning by organic mercury compounds. Industrial mercurial poisoning has lessened since the metal has ceased to be used in many processes such as the backing of mirrors and the felt-hat trade. Even so, the risk remains in other spheres and clear details are given about the medical supervision of persons at risk. Each chapter has a long list of references covering the literature up to the end of 1961. This book is highly recommended to all physicians and industrial medical officers who may be faced with the problems of mercury poisoning.

C. ALLAN BIRCH.

## *Hypoxia at High Altitude*

**Hypoxia.** By Edward J. Van Liere, M.D., and J. Clifford Stickney. (Pp. 381+x. 65s.) London: University of Chicago Press. 1964.

This book reviews the subject of hypoxia, concentrating upon the knowledge gained by physiological studies both in the animal and in the normal human subject. The approach throughout is unequivocally that of workers interested in the problems of life at high altitude, of aviation medicine, and of space flight. Within this field the authors have summarized and commented upon the enormous literature which has accumulated over the past century. Studies derived from clinical medicine seem to have been excluded by design, so that hypoxia in disease is mentioned only in passing, and some topics of great interest to clinicians are considered only briefly or not at all. For instance, seven lines are devoted to hypothermia, with references to work on animals, but none to the contributions made of recent years as a consequence of clinical applications of hypothermia. This comment is meant not as a criticism but to indicate a limitation of subject matter which the authors have chosen for themselves. Their book presents in convenient form the evidence derived from studies in the laboratory and at altitude concerning the effects of hypoxia on every aspect of the function of the animal body; and for this not only physiologists and those concerned with aviation medicine but also clinicians will be grateful to them.

J. G. SCADDING.

## Books Received

*Review is not precluded by notice here of books recently received.*

**Ocular Fine Structure.** By Marie A. Jackus, Ph.D., Retina Foundation Institute of Biological and Medical Sciences. Monographs and Conferences: Volume 1. (Pp. 204; illustrated. £5 7s. 6d.) London: J. & A. Churchill Ltd. 1964.

**Das Röntgenbild des Schädels.** Bei Intrakranielle Drucksteigerung im Wachstumsalter. By W. Tonnis and G. Friedmann. (Pp. 107+vii; illustrated. DM. 58.) Berlin. Göttingen, Heidelberg: Springer Verlag. 1964.

**Progress in Biocybernetics.** Volume I. Edited by Norbert Weiner and J. P. Schade. (Pp. 204+x; illustrated. 70s.) Amsterdam, London, New York: Elsevier Publishing Co. 1964.

**Perceptual and Visuo-Motor Disorders in Cerebral Palsy.** A Survey of the Literature. By M. L. J. Abercrombie. Preface by Prof. A. Moncrieff. Little Club Clinics in Developmental Medicine, No. 11. (Pp. 136; illustrated. 25s.) London: The Spastics Society Medical Education and Information Unit in Association with William Heinemann Medical Books Ltd. 1964.

**Fysisk Handicappede I Danmark.** By B. R. Andersen. With English Summary. (Pp. 269. Kr. 10.) Copenhagen: Social Research Institute. 1964.

**The Ordeal of Wonder.** Thoughts on Healing. By Edmund R. Morgan. (Pp. 166. 25s.) London: Oxford University Press. 1964.

**Langzeitbehandlung mit Antikoagulantien.** VI. Hamburger Symposion über Blutgerinnung, 24–25 May 1963. Edited by Prof. Dr. L. Zukschwerdt and Priv.-Doz. Dr. H. A. Thies. (Pp. 238+x; illustrated. DM. 36.) Stuttgart: F. K. Schattauer-Verlag. 1964.

**Schilddrüsenhormone und Körperperipherie.** Regulation der Schilddrüsenfunktion. Zehntes Symposion der Deutschen Gesellschaft für Endokrinologie in Wien vom 7 bis 9 Marz 1963. Edited by Professor Dr. Erich Klein. (Pp. 309; illustrated.; DM. 69.) Berlin, Göttingen, Heidelberg: Springer-Verlag. 1964.